

From: CTE Division
Date: Jan. 15, 2015

Subject: Open Enrollment 2015



Open Enrollment Guide

Overview

Each spring, all Tennessee school districts receiving Perkins funds are required to select their CTE programs of study for the upcoming school year in eTIGER. In preparation for this year's "Open Enrollment" window, we have prepared this guide to share important information about our 2015-16 courses and programs of study. Please review the following information on each career cluster prior to making your final program of study selections. If you have additional questions, please reach out to the appropriate Career Cluster Consultant, listed below, or Casey Haugner Wrenn at Casey.Haugner@tn.gov. If you have questions regarding eTIGER, please contact Li-Zung Lin at Li-Zung.Lin@tn.gov.

Career Cluster	Consultant	Email	Phone
Advanced Manufacturing	Casey Haugner Wrenn	Casey.Haugner@tn.gov	(615) 532-2844
Agriculture, Food, & Natural	Steve Gass	Steven.Gass@tn.gov	(615) 532-2847
Resources			
Architecture & Construction	Rachel Allen	Rachel.Allen@tn.gov	(615) 532-2835
Arts, Audio/Visual Technology, &	Rachel Allen	Rachel.Allen@tn.gov	(615) 532-2835
Communications			
Business Management &	Casey Haugner Wrenn	Casey.Haugner@tn.gov	(615) 532-6248
Administration			
Education & Training	Deborah Thompson	<u>Deborah.Thompson@tn.gov</u>	(615) 532-2840
Finance	Casey Haugner Wrenn	Casey.Haugner@tn.gov	(615) 532-6248
Government & Public	Amy Howell	Amy.F.Howell@tn.gov	(615) 532-2839
Administration			
Health Science	Amy Howell	Amy.F.Howell@tn.gov	(615) 532-2839
Hospitality & Tourism	Deborah Thompson	<u>Deborah.Thompson@tn.gov</u>	(615) 532-2840
Human Services	Deborah Thompson	<u>Deborah.Thompson@tn.gov</u>	(615) 532-2840
Information Technology	Casey Haugner Wrenn	Casey.Haugner@tn.gov	(615) 532-2844
Law, Public Safety, Corrections, &	Amy Howell	Amy.F.Howell@tn.gov	(615) 532-2839
Security			
Marketing	Casey Haugner Wrenn	Casey.Haugner@tn.gov	(615) 532-6248
Science, Technology, Engineering,	Casey Haugner Wrenn	Casey.Haugner@tn.gov	(615) 532-2844
& Mathematics (STEM)			
Transportation, Distribution, &	Rachel Allen	Rachel.Allen@tn.gov	(615) 532-2835
Logistics			



Making your Program of Study Selections

Before you log-in to eTIGER and make your program of study selections for 2015-16, it is important that you take the time to review the following information and materials. This selection process should go hand-in-hand with your preparation for developing your 2015-16 Local Plan, determining your staffing decisions, and most importantly building pathways that will ensure your students are successful. As you prepare to select your programs of study, we recommend having the following resource materials available:

- □ Career Cluster Considerations from this guide (pages 3-11)
- □ 2015-16 Programs of Study: https://tn.gov/education/topic/career-clusters
- □ eTIGER Open Enrollment Instructions: https://tn.gov/education/topic/cte-accountability-and-data-reporting
- □ Labor market/industry data for your city, county, and region
- Available postsecondary program offerings, and early postsecondary opportunities, at local postsecondary schools
- □ List of your district's current CTE staff, including licensure, endorsements, and training of each and the 2015-16 Endorsement Crosswalk (sent via CTE Director Updates)
- □ Input from local Business & Industry Advisory Council

After collecting and reviewing this information, it is important that you have meaningful conversations with your teachers to ensure the selections of all of the programs of study for your district meet the following profile:

- Provide a clear pathway to available employment and postsecondary training in your region
- □ Match the background and expertise of your available personnel
- □ Follow a course sequence outlined in the 2015 -16 Programs of Study

Other Notes

As you will see in eTIGER, there are some name changes to courses and programs of study to reflect changes from 2014-15 to 2015-16. These include changing names of some programs of study to reflect changes in the courses and sequencing in the programs. Further changes (such as slight name changes to existing course codes) will happen at the conclusion of the 2014-15 school year in preparation for the opening of the 2015-16 school year in fall 2015.



Career Cluster Considerations

For more information on the following Career Clusters, please visit our website at https://tn.gov/education/topic/career-clusters.

Advanced Manufacturing

Changes from 2014-15

- The Welding Program of Study is now found in the Advanced Manufacturing career cluster. This move allows
 for better alignment with employment trends, however it does not impact the teacher endorsements
 required to teach the courses.
- All programs of study have a new capstone course available: *Manufacturing Practicum*. This highly customizable course should be used to further the learning of your students in any Advanced Manufacturing pathway.
- Please see information on the Advanced Manufacturing website at https://tn.gov/education/article/cte-cluster-advanced-manufacturing regarding new standards for some courses, such as Advanced Electromechanical Technology, which takes the place of Electromechanical I.

Additional Considerations

- We are seeing an increase in the use of the *Mechatronics* program of study based on employer needs in the state. There are some dual enrollment and dual credit opportunities available at select postsecondary institutions which may allow you to implement this program of study at a lower cost. Reach out to your local community college or college of applied technology to inquire about potential partnerships.
- Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Advanced Manufacturing.

Agriculture, Food, & Natural Resources

Changes from 2014-15

• There are no major changes in this career cluster since last year.

- Both Work-Based Learning: Career Practicum and Supervised Agricultural Experience can be used to customize credits for a student toward a concentration in Agriculture.
- For those districts with a strong Agriculture program, we recommend offering *Introduction to Agricultural Sciences* at the middle school level.



Architecture & Construction

Changes from 2014-15

- The Welding program of study can now be found in the Advanced Manufacturing career cluster. This is to better align with employment trends; however, it does not impact the teacher endorsements required to teach the Welding courses.
- The *Production Design* program of study (*Computer-Aided Drafting* courses) has been replaced with the *Architectural & Engineering Design* program of study.
- The Electrical Systems; Heating, Ventilation, Air Conditioning, and Refrigeration; and Plumbing programs of study have been replaced by the Mechanical, Electrical, & Plumbing (MEP) Systems program of study.
- The Masonry Construction, Concrete Construction, and Carpentry programs of study have been replaced by the Structural Systems program of study.
- A new Architecture & Construction program of study, *Residential & Commercial Construction*, has been added for systems that desire a more comprehensive approach.
- The newly developed *Construction Practicum* course has taken the place of the *Entrepreneurship* course as the capstone for each program of study. This course allows districts the flexibility to customize a course aligned to apprenticeships or internship programs in a desired trade, while also imparting necessary project management and business knowledge and skills.

- Residential & Commercial Construction works well in schools or districts with the capacity to offer only one
 construction pathway and/or job outlooks in the community demand students with a diverse set of
 construction skills, as it focuses on basic skills useful in many construction career pathways.
- For schools or districts where two construction programs are feasible and/or job outlooks in the community
 demand a number of students trained in a specific specialized area, Structural Systems and Mechanical,
 Electrical, & Plumbing Systems work well. Both allow students to select an area in which to develop a
 specialized skill.
- Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Architecture & Construction.



Arts, Audio/Visual Technology, & Communications

Changes from 2014-15

- The *Printing Graphics* program of study has been retired due to changes in labor market needs. If you are currently offering this program, we recommend replacing it with *Digital Arts & Design*. Please see the endorsement crosswalk for teacher industry certification requirements to teach the new courses.
- Audio Production and Journalism and Broadcasting programs of study have been retired in favor of more
 updated industry courses. If you are currently offering Audio Production, please reach out to Rachel Allen at
 Rachel.Allen@tn.gov to discuss a special program of study. If you are currently offering Journalism and
 Broadcasting, we recommend transitioning to the Audio/Visual Production program of study.
- Applied Arts Practicum is a new, customizable course available as a capstone for these programs of study.

Additional Considerations

• Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Arts, Audio/Visual Technology, & Communications.

Business Management & Administration

Changes from 2014-15

- The Administrative and Information Support program of study has been replaced with Office Management and is now better aligned to available industry certifications in software packages, such as Microsoft Office.
- The first level courses in the Business Management & Administration programs of study have been streamlined to better align necessary knowledge and skills for each particular pathway. If you are currently offering the Business Principles course, we recommend transitioning to Introduction to Business & Marketing.
- A new course, Business & Entrepreneurship Practicum, will be available as a capstone option.
- Some general education course codes duplicative of existing CTE courses (such as *Business Economics* and *Accounting I*) are no longer available. Please use current CTE course codes when scheduling these courses.

- Business Management works well in schools or districts who are looking for a pathway into postsecondary business programs and/or have successful capstone business programs already in place, such as Virtual Enterprise International.
- For those districts looking for industry certifications in software applications that are valued by industry and
 prepare students for both immediate employment and matriculation to postsecondary programs or looking
 for a more customizable course to support existing school programs (available through Advanced Computer
 Applications), we recommend offering the Office Management program of study.
- For those districts with a strong Business Management & Administration program, we recommend offering Computer Applications at the middle school level to ensure students are entering the program with the



appropriate technical expertise to move effectively through the program of study's advanced courses. Students who have taken *Computer Applications* in middle school may move directly into the second level course in the *Office Management* program of study.

• Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Business Management & Administration.

Education & Training

Changes from 2014-15

• There are no major changes in this career cluster since last year.

Additional Considerations

- For those districts with a strong Education & Training program, we recommend offering *Introduction to Social Health* at the middle school level.
- Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Education & Training.

Finance

Changes from 2014-15

- The *Financial Planning* program of study has been retired. If you are currently offering this program, we recommend transitioning to the *Banking and Finance* program of study.
- The first level courses in the Finance programs of study have been streamlined to better align necessary knowledge and skills for each particular pathway. If you are currently offering the *Business Principles* course, we recommend transitioning to *Introduction to Business & Marketing*.
- Some general education course codes duplicative of existing CTE courses (such as Accounting I, Accounting II, and Financial Planning) are no longer available. Please use current CTE course codes when scheduling these courses.

Additional Considerations

 Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Finance.



Government & Public Administration

Changes from 2014-15

• There are no major changes in this career cluster since last year.

Additional Considerations

 Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Government & Public Administration.

Health Science

Changes from 2014-15

- A new program of study, Clinical Exercise Physiology, has been added to prepare students for employment
 and further postsecondary training in rehabilitation, exercise science, and physical training areas. If you are
 currently customizing your existing Health Science program to offer students experience in athletic training
 or comparable skills, this new program will be a good match.
- Several Health Science courses have undergone standards revisions. Please visit the Health Science website at https://tn.gov/education/article/cte-cluster-health-science for more information.

Additional Considerations

- For those districts with a strong Health Science program, we recommend offering *Introduction to Health Science* at the middle school level.
- Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Health Science.

Hospitality & Tourism

Changes from 2014-15

- The Sports and Entertainment Management and Hospitality and Tourism Management programs of study have been revised and combined to avoid duplication across courses. If you are currently offering Sports and Entertainment Management, we recommend transitioning to the Hospitality and Tourism Management program of study.
- New capstone courses, *Culinary Arts IV* and *Event Planning & Management* are now available to further student learning in the programs of study in this career cluster.
- All course standards in this cluster have been revised. Please visit the Hospitality & Tourism website at https://tn.gov/education/article/cte-cluster-hospitality-tourism for more information.



Additional Considerations

- The Hospitality and Tourism Management program of study is highly customizable based on local
 community needs. It can be used to address not only available employment opportunities, but also
 continued postsecondary training in the hospitality and hotel management, sports, and entertainment fields
 of study. The Event Planning & Management course is designed to build on partnerships with local
 businesses and organizations and includes flexibility to focus on a particular area of interest for your
 students.
- Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Hospitality & Tourism.

Human Services

Changes from 2014-15

• There are no major changes in this career cluster since last year.

Additional Considerations

- If you are currently offering the *Cosmetology* or *Barbering* programs of study, we recommend that you build relationships with your local postsecondary institution to ensure appropriate transition of student hours toward a license.
- For those districts with a strong Human Services program, we recommend offering *Introduction to Social Health* at the middle school level.
- Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Human Services.

Information Technology

Changes from 2014-15

- The Game Programming course has been replaced with the Programming & Software Development Practicum to provide a more robust capstone experience for the Programming & Software Development program of study. If you are currently teaching Game Programming, we encourage you to transition to Programming & Software Development Practicum and customize it with assignments and projects that are aligned to student interest. This capstone may also replace special courses in mobile application (app) development.
- Many of the courses in this career cluster have revised standards. Please refer to the Information
 Technology website at https://tn.gov/education/article/cte-cluster-information-technology for more information.



Additional Considerations

- For those districts with a strong Information Technology program, we recommend offering *Computer Applications* at the middle school level to ensure students are entering the program with the appropriate technical expertise to move effectively through the advanced courses.
- Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Information Technology.

Law, Public Safety, Corrections, & Security

Changes from 2014-15

• There are no major changes in this career cluster since last year.

Additional Considerations

• Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Law, Public Safety, Corrections, & Security.

Marketing

Changes from 2014-15

- The Marketing Communication and Merchandising programs of study have been combined into Marketing Management. This new program of study allows districts to customize the capstone course offering to best prepare students for appropriate opportunities in their communities.
- The first level courses in the Marketing programs of study have been streamlined to better align necessary knowledge and skills for each particular pathway. If you are currently offering the *Exploration of Organizational Leadership & Marketing* course, we recommend transitioning to *Introduction to Business & Marketing*.
- A new capstone course, *Business & Entrepreneurship Practicum*, is now available to further customize the experience for students in the *Entrepreneurship* program of study. Students now have an additional year to work on ideas for start-up business ventures, while earning credit toward a concentration.

Additional Considerations

• For those marketing teachers who want to focus a program on sports or entertainment marketing, we recommend offering the *Hospitality and Tourism Management* program of study in the Hospitality & Tourism career cluster. Many of the marketing standards from *Marketing I* are covered in the new *Hospitality Marketing* course, and the program's capstone course may be customized to focus on an area of community need and student interest.



• Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Marketing.

Science, Technology, Engineering, & Mathematics (STEM)

Changes from 2014-15

There are no major changes in this career cluster since last year.

Additional Considerations

- Due to a drop in program enrollment and inconsistent use of available resources, the department will no longer be funding state consortium status with the International Technology and Engineering Educators Association (ITEEA), starting with the 2015-16 school year. If a school or district is currently offering the *Engineering by Design* program of study and would like to continue to receive resources from ITEEA in the Engineering by Design model program, additional costs may be incurred at the district level. For information about becoming an ITEEA Network School, reach out to Barry Burke at bburke@iteea.org. As an alternative, we recommend that districts consider transitioning to the *STEM Education* or *Engineering* programs of study. Both are offered at no additional cost. Please see the endorsement crosswalk for information on endorsements which qualify a teacher to teach these courses. Training in STEM will be available at the 2015 Institute for CTE Educators. Department staff will be reaching out to impacted districts to discuss options during the Open Enrollment period.
- For those districts with a strong STEM program, we recommend offering the suite of available middle school STEM courses between sixth and eighth grade in order to prepare students for advancement in high school.
- Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in STEM.

Transportation, Distribution, & Logistics

Changes from 2014-15

Course standards have been revised in the Automotive Collision Repair program of study. Schools and
districts can now customize this program of study with the courses that are most appropriate. Districts may
choose to focus in Non-Structural Repair or Painting & Refinishing or both. Please see the Transportation,
Distribution & Logistics career cluster website at https://tn.gov/education/article/cte-cluster-transportation-distribution-logistics for more information about possible course sequencing.

- If you are currently offering the *Aviation Maintenance* and/or *Diesel Technology* programs of study, please continue building relationships with your local postsecondary institution to ensure appropriate transition of student hours toward an industry certification.
- Work-Based Learning: Career Practicum can be used to customize credits for a student toward a concentration in Transportation, Distribution, & Logistics.